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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/676,722	09/28/2000	Donald L. Wilson	12548US02	2793

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04/12/2002

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EXAMINER

GRIER, LAURA A

ART UNIT

PAPER NUMBER

2644

DATE MAILED: 04/12/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

✓

Office Action Summary

Application No.

09/676,722

Applicant(s)

WILSON ET AL.

Examiner

Laura A Grier

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. The indicated allowability of claim of 2, 6, 11, and 14-21 is withdrawn in view of the newly discovered reference(s) to Bauman, U. S. Patent No. 5982908 and Leenen, U. S. Patent No. 5395168. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. **Claims 1-7, 10 and 16** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. **Claims 1, 10 and 16** recite the limitation "the vertical axis" in line 11-claim 1; line 3-claims 10 and 16, respectively. There is insufficient antecedent basis for this limitation in the claim.

Claims 1, 10 and 16 recite the limitation, "the vertical axis". The relation of the vertical axis to a particular part of the device is not defined and/or understood in the claim or specification.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 1, 3-5 and 7** are rejected under 35 U.S.C. 103(a) as being unpatentable over Iseberg et al. in view of Baumann, U. S. Patent No. 5982908.

Regarding **claim 1**, Iseberg et al. discloses high fidelity insert earphones and methods of making same. Iseberg et al.'s disclosure comprises a housing, a receiver, a flexible eartip and a tube nipple (figure 2 and col. 2, lines 7-67 and col. 4, lines 1-24). However, the housing and tube nipple of Iseberg et al. fails to specifically disclose the arrangement configuring an obtuse angle between the longitudinal axis and vertical axis of the tube, and as well as the tube extending to the externally to the housing. The examiner maintains that such a structure was well known in the art.

Regarding the structure, in a similar field of endeavor, Bauman discloses an in-the-ear hearing device. Bauman's disclosure comprises a housing structure (figure 1) that would enable the arrangement of a tube to configure an obtuse angle between the longitudinal axis tube and the curvature of the housing about its vertical axis, and further Bauman's flexible tube extends from inside the housing to the outside.

It would have been obvious to one of the ordinary skill in the art at time the invention was made to modify the invention of Iseberg et al. to provided such a structured configuration of the housing to acquire the structure desired for the particular physical compatibility of the user's ear structure, and thus merely optimizing the structure of the earphone for the desired function of an insert earphone.

Regarding **claim 2**, Iseberg et al. and Bauman fail to specifically disclose the obtuse angle as 118 degrees. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Iseberg et al. and Bauman by providing the structure with a specific angular structure of 118 degrees for the purpose of optimizing the structure of the earphone for the desired function of an insert earphone and/or device.

Regarding **claims 3-5 and 7**, Iseberg et al. and Bauman disclose everything claimed as applied above (see claim 1). However, Iseberg et al. further discloses the claimed limitations in figure (2).

Regarding **claim 6**, Iseberg et al. and Bauman disclose everything claimed as applied above (see claim 1). Iseberg discloses an acoustic damper, however, the damper is not disclosed at the first end of the tube as claimed. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to position the damper as desired, wherein it may be positioned in various areas of the sound passageway of the tube for specific purposes for enhancing and/or modifying the frequency response characteristics of the ear device.

7. **Claims 8-9, and 12-13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Iseberg et al. in view of Leenen, U. S. Patent 5395168.

Regarding **claim 8**, Iseberg et al. discloses high fidelity insert earphones and methods of making same. Iseberg et al.'s disclosure comprises a housing, a receiver, a flexible eartip and a tube nipple having a 1st end and 2nd end, indicative of a rigid tube

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(figure 2 and col. 2, lines 7-67 and col. 4, lines 1-24). However, Iseberg et al. fails to specifically disclose the tube extend from within the housing to the outside of the housing. The examiner maintains that such tubes are well known in the art.

Regarding the tube, in similar field of endeavor, Leenen discloses an in the ear hearing device. Leenen's device comprises a rigid flexible tube that extends from withing the housing to the external structure of the housing.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Iseberg et al. by implementing an extended tube for the purpose of the providing means of easily removing the device and as well providing suppression of unwanted noises for optimal hearing.

Regarding **claim 14**, Iseberg et al. and Leenen disclose everything claimed as applied above (see claim 8). Iseberg discloses an acoustic damper, however, the damper is not disclosed at the first end of the tube as claimed. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to position the damper as desired, wherein may positioned in various areas of the sound passageway of the tube for specific purposes for enhancing and/or modifying the frequency response characteristics of the ear device.

8. **Claim 10** is rejected under 35 U.S.C. 103(a) as being unpatentable over Iseberg et al. in view of Leenen and further in view of Bauman.

Regarding **claim 10**, Iseberg et al. and Leenen disclose everything claimed as applied above (see claim 8). However, the housing and tube nipple of Iseberg et al. fails

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to specifically disclose the arrangement configuring an obtuse angle between the longitudinal axis and vertical axis of the tube. The examiner maintains that such a structure was well known in the art.

Regarding the structure, in a similar field of endeavor, Bauman discloses an in-the-ear hearing device. Bauman's disclosure comprises a housing structure (figure 1) that would enable the arrangement of a tube to configure an obtuse angle between the longitudinal axis tube and the curvature of the housing about its vertical axis, and further Bauman's flexible tube extends from inside the housing to the outside.

It would have been obvious to one of the ordinary skill in the art at time the invention was made to modify the invention of Iseberg et al. to provided such a structured configuration of the housing to acquire the structure desired for the particular physical compatibility of the user's ear structure, and thus merely optimizing the structure of the earphone for the desired function of an insert earphone.

Regarding **claim 11**, Iseberg et al., Leenen and Bauman fail to specifically disclose the obtuse angle as 118 degrees. It would have been obvious to one to of the ordinary skill in the art at the time the invention was made to modify the invention of Iseberg et al. and Bauman by providing the structure with a specific angular structure of 118 degrees for the purpose optimizing the structure of the earphone for the desired function of an insert earphone and/or device.

9. **Claim 15-21** are rejected under 35 U.S.C. 103(a) as being unpatentable over Iseberg et al. in view of Baumann (hereafter, Iseberg).

Regarding **claims 15-16**, Iseberg et al. discloses high fidelity insert earphones and methods of making same. Iseberg et al.'s disclosure comprises a housing, a receiver, a flexible eartip and a tube nipple (figure 2 and col. 2, lines 7-67 and col. 4, lines 1-24). However, the housing and tube nipple of Iseberg et al. fails to specifically disclose the arrangement configuring an obtuse angle between the longitudinal axis and vertical axis of the tube, and as well as the tube extending to the externally to the housing. The examiner maintains that such a structure was well known in the art.

Regarding the structure, in a similar field of endeavor, Bauman discloses an in-the-ear hearing device. Bauman's disclosure comprises a housing structure (figure 1) that would enable the arrangement of a tube to configure an obtuse angle between the longitudinal axis tube and the curvature of the housing about its vertical axis, and further Bauman's flexible tube extends from inside the housing to the outside.

It would have been obvious to one of the ordinary skill in the art at time the invention was made to modify the invention of Iseberg et al. to provided such a structured configuration of the housing to acquire the structure desired for the particular physical compatibility of the user's ear structure, and thus merely optimizing the structure of the earphone for the desired function of an insert earphone.

Iseberg discloses an acoustic damper, however, the damper is not disclosed at the first end of the tube as claimed. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to position the damper as desired, wherein may positioned in various areas of the sound passageway of the tube for

specific purposes for enhancing and/or modifying the frequency response characteristics of the ear device.

Regarding **claim 17**, the claimed limitations are rejected for the same reason set forth in the rejection of claim 11.

Regarding **claim 18**, the claimed limitations are rejected for the same reason set forth in the rejection of claim 4.

Regarding **claim 19**, the claimed limitations are rejected for the same reason set forth in the rejection of claim 9.

Regarding **claim 20**, the claimed limitations are rejected for the same reason set forth in the rejection of claim 3.

Regarding **claim 21**, the claimed limitations are rejected for the same reason set forth in the rejection of claim 7.

Response to Arguments

Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues the prior art previously used failed to teach the claimed invention in regards the structure configuring an obtuse angle and the extension of the tube as amended. The examiner accepts the applicants' arguments and have set forth a new rejection. And further, the examiner admits the oversight of the Iseberg et al. reference being a 102 (b) and/or 103 (a) type reference. And the reference of Iseberg is

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maintain, in that it supports largely various features of the inventions, e.g. the tube nipple. However other references of prior art have use provided as well.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura A Grier whose telephone number is (703) 306-4819. The examiner can normally be reached on Monday - Friday, 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W. Isen can be reached on (703) 305-4386.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231


Or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

LAG
April 8, 2002


FORESTER W. ISEN
SUPERVISORY PATENT EXAMINER
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